

**CAPACITIVE SENSOR FOR DETECTING THE  
THICKNESS OR APPLICATION OF AN  
AUTOMOBILE BRAKE PAD**

ABSTRACT OF THE DISCLOSURE

A capacitive sensor for sensing the thickness of an automobile brake pad is provided. The sensing capacitor includes a pair of parallel plates that are arranged such that brake pad wear reduces the size of one or both of the pads. The reduced size of the plate(s) is detectable as a change in capacitance between the plates. In one aspect a reference capacitor is also placed within the brake pad. The reference capacitor includes a pair of plates that do not change size during wear of the brake pad. The capacitance of the sensing capacitor can be compared to the capacitance of the reference capacitor for a more accurate indication of pad wear.